

PROGRESS REPORT

PROJECT TITLE: Range Sustainability Services – Cherry Point, Camp Lejeune Range Complex, NC
PROGRESS REPORT NO.: 07
PRIME CONTRACTOR: The Environmental Company, Inc.
PRIME CONTRACT NO.: N62472-01-D-1390
DELIVERY ORDER NO.: 0001
TEC PROJECT NO.: P6901
SUBCONTRACTOR: SRS Technologies
PERIOD: Jan 1 – Jan 31, 2003

<u>Task</u>	<u>Title and Deliverable</u>	<u>Complete</u>
1	Develop Workplan	100.0%
2	Develop RCMP Cherry Point/Lejeune	55.0%
3	Develop RCMP Template	20.0%
4	Briefings and Meetings	40.0%
5	Status Reports	22.0%
6	IT Compatibility	20.0%
Estimated Overall Project Complete		47.5%

Work Performed During This Period:

- Continued data collection activities. Conducted two Data Collection/Analysis visits to Cherry Point, Camp Lejeune.
 - 17-19 December 2002 Cherry Point and Camp Lejeune
 - 22-24 January 2003 Cherry Point and Camp Lejeune
- Data analysis and range/training area characterization.
- Analyzed airspace utilization within the VACAPES, Cherry Point, and Camp Lejeune operating areas.
- Outline revisions.
- Completed drafts of sub-chapters in sections I and II.
- Developed methodology and template for determining Range Operations to be assessed utilizing Navy Tactical Tasks (NTTL) and linking the NTTLs to unit mission areas and training events.
- Developed encroachment template and matrix utilizing the encroachment impacts developed in the Ranges to Readiness Study (R2R) and the encroachment factors as defined by the Senior Readiness Oversight Committee (SROC) in DoD.
- Developed template for targets/target systems assessment.

Index of Attached Contact Reports

#1-26 Provided in RCMP Quarterly Report 1
#27 Doug Piner, MCB CLNC EMD, 16 Oct 2002
John Johnson, MCB CLNC Conservation Outreach
Martin Korenek, MCB CLNC Wetlands Section
Rich Richardson, MCB CLNC Archeology
Tom Barbee, MCB CLNC NEPA
Danny Marshburn, MCB CLNC Forestry
Karen Ogden, MCB CLNC Threatened & Endangered Species

- #28 Major Jim DESY, II MEF SOTG 19 Dec 2002
Captain Jason Richter, 26 MEU(SOC) HQ S-3
- #29 Joe Ramirez, MCB CLNC TRMD, 18 Dec 2002
- #30 Renee Hawthorne, MCB CLNC G-3, 18 Dec 2002
- #31 Pete Black, MCB CLNC Forestry, 18 Dec 2002
- #32 Peggy Briley, MCB CLNC Range Development, 18 Dec 2002
- #33 Emily Sylvester, MCB CLNC Air Quality, 22 Jan 2003
- #34 Karen Ogden, MCB CLNC, 22 Jan 2003
- #35 Col Chris Clayton, MAG-26, 22 Jan 2003
Maj Gary Maddux
Maj Bert Pridgen
Capt Mark Makarewicz

Actions or Issues Requiring Special Attention:

- Visit Coordination to USMC Commands
 - As of 8 November 2002, Direct Liaison (DIRLAUTH) authorized by HQMC and MARFORLANT. Coordination of visits is authorized through II MEF, MCB Camp Lejeune, and MCAS Cherry Point.
- CLF/TECOM approval/concurrence for:
 - Range operations to be included in RCMP
 - Strategic vision
 - Alternatives to the proposed action
- Range Capabilities Document
 - The Range Capabilities Document has been proposed as a possible Task 7 to the original contract. Final approval of this tasking is still be determined by Atlantic Fleet.

Significant Events Scheduled for the Following Period

- Continue Data Collection/Analysis
 - Feb – Cherry Point/Camp Lejeune
 - Mar – Norfolk, Cherry Point, and Camp Lejeune
- Incorporate data and analysis into Draft RCMP
- Conduct review meetings and briefings
- Monitor Navy Range Management System and other IT developments

Budget: TEC has invoiced for 47.5% of the delivery order budget.

Delivery Order Budget:	\$745,000.00
Invoiced to Date:	\$354,089.00

Progress Report Recipients:

<u>Name/Organization</u>	<u>Internet Address</u>
Virginia McAllister, EFA NE	mallsitervf@efane.navfac.navy.mil
Bryan Murphy, CINCLANTFLT	bryan.murphy@navy.mil
John Van Name, LANTDIV	vannamejp@efdlant.navfac.navy.mil
R. G. Head, SRS Technologies	rg.head@wg.srs.com

RCMP CONTACT FORM

No. 27

Name/Company: Chuck Maguire/TEC

Persons Contacted:

Mr. Doug Piner	Head, Environmental Conservation Branch	451-5063
Mr. John Johnson	Conservation Outreach	451-7227
Mr. Martin Korenek	Wetlands Section	451-7235
Mr. Rick Richardson	Archeology	451-7230
Mr. Tom Barbee	NEPA	451-9363
Mr. Danny Marshburn	Forester	451-2195
Ms. Karen Ogden	Threatened & Endangered Species	451-7229

Organization: MCB Camp Lejeune, Environmental Conservation Group

Telephone/Email: See list

Date: October 16, 2002

Reason for Contact: Establish personal contact with individuals.

Summary of Discussion:

The 1330 formal opening of the meeting was deferred until the arrival of the SRS team who had been delayed because of a flight cancellation. While we were waiting the group made small talk and discussed Camp Lejeune issues such as size of the deer herd, damages to vegetation and accidents caused by deer, etc.

Upon SRS' arrival and after general introductions, Dave Hearing explained the RCMP, the players, its purpose and components. The MCB Camp Lejeune Environmental planning folks then introduced themselves and described their responsibilities.

Camp Lejeune, as is the case with most Naval installations, has multiple environmental planning documents. Each document meets a specific purpose e.g., the Integrated Natural Resource Management Plan (INRMP) meets the Sikes Act Improvement Act legal and DOD requirements, but separate plans exist for cultural resources, timber management, fire suppression, etc. The team was advised that while there was not an official community plans and liaison person, Mr. Joe Ramirez of the Operations Division was the Marine representative to an ongoing Joint Land Use Study (JLUS) and the County Comprehensive Plan group.

While copies of these various plans were not available at the meeting, each person assured that they could provide a copy of their respective plan or that the plan was or would soon be posted on the Camp Lejeune Web site.

Mr. Tom Barbee, the Camp Lejeune NEPA coordinator, was specifically requested to provide a list of Environmental Assessments and EISs for any projects that directly related to any training activity or directly supported training e.g., an exercise or a new range. Mr. Barbee agreed to provide the list to Mr. Harding. The meeting concluded at approximately 1545.

RCMP CONTACT FORM

No. 28

Name/Company: Mike Wentz (SRS)/Steve Golle (TEC)

Person Contacted: Major Jim Desy, Captain Jason Richter

Organization: II MEF Special Operations Training Group (SOTG), HQ 26 MEU(SOC)

Telephone/Email:

Date: December 19, 2002

Reason for Contact: Operations Data and Range Capabilities Discussion

Summary of Discussion:

Mike and Steve met with Major Jim Desy, the Operations Officer for II MEF SOTG, and Captain Jason Richter, the Fire Support Officer for 26 MEU(SOC) HQ. After a short explanation of the RCMP project, both Capt Richter and Maj Desy discussed how CLNC supported, affected, and impacted training during the PTP. This discussion also included recommended improvements and capabilities needed to support MEU preparation and deployment.

SOTG organizes and instructs each MEU on its SOC capabilities prior to SOCEX and certification. The difficulty for both the MEU and SOTG is that there are no formal guidelines or standards to evaluate the MEU's performance on its operational missions. Current evaluations are conducted utilizing checklists and after-action report recommendations from prior MEU elements.

The majority of training during the PTP is conducted within CLNC's training areas (around 60%). Certain exercises and large-scale evolutions are conducted off-site to allow the units to have a greater to train every aspect of its warfighting capabilities and are met with real time constraints outside of the known parameters of Camp Lejeune. Examples of off-site evolutions are: Training in an Urban Environment Exercise (TRUEX), the Amphibious Ready Group Exercise (ARGEX), and exercising the MEU's Humanitarian Assistance (HA) mission. Areas where these exercises have occurred are: Ohio, Virginia (Fort A.P. Hill and Ft. Pickett), Florida, and Alabama. Off-site training also provides the MEU the opportunity to exercise its long range capabilities/missions that would be constrained if at Camp Lejeune.

Although it is preferred to utilize the Camp Lejeune facility during the PTP process, limited capabilities and restrictions hinder total utilization. The following is a list of those restrictions/capabilities discussed by Maj Desy and Capt Richter:

- MEU centric training has a low priority within the Lejeune complex. First priority is given to the Capabilities Exercise (CAPEX) (dog-n-pony show) for all training areas and

facilities. MOS producing schools, in particular SOI, have the next priority. The MEU's/PTP then have third priority in scheduling.

- The MEU's typically do not utilize the GSRA, except for individual unit training for Tanks, LAVs, and selective infantry units. The major hindrances to the GSRA are the restrictions on flight levels, ordnance, and flight operations within the GSRA's airspace.
- There is no dedicated OPFOR for unit's to train against. Non-MEU units are normally tasked with providing personnel for this task. However, this tasking is not given a high priority and the OPFOR is typically undermanned, lacks enthusiasm and moral, and does not employ threat tactics, weapons, or capabilities.
- Integration of training and the ability to simulate a true combined arms event is limited due to the F/W aviation restrictions aboard Camp Lejeune. Ordnance, altitude, and space restrictions at GSRA and G-10 limit full integration of MEU assets.
- The current MOUT facility is limited in meeting the training needs and requirements of the MEU and SOTG. Realism of its location and access (1 road in and out) hinders realistic training environment. The existing facility does not possess live fire capabilities, a dedicated civilian community, furnished buildings, urban trash and debris in rooms and streets, varieties of buildings (industrial, commercial, residential), thermal signatures, and does not accommodate live breaching charges for forced entry training.
- Current embassy compound is incorporated within the MOUT facility. As with the MOUT facility, the embassy compound lacks the necessary infrastructure to provide a realistic training environment.
- Reconnaissance and Surveillance (R&S) assets deploy with some degree of laser training due to limited laser equipment training at Camp Lejeune. MLE assets go off-site for the majority of the PTP.
- Beach area is insufficient for realistic amphibious operations. Landing site is 1.5 KM long and units are required to exit the landing site via one road.
- There is limited inter-operability between the ARG/MEU and the CVBG. (Currently on 2 separate deployment cycles)

Both Maj Desy and Capt Richter gave recommendations concerning unconstrained range requirements.

- The entire beach (20KM) should be utilized for battalion sized amphibious landings and operations. The BT-3 impact area should be extended inland to allow for combined fire and maneuver areas from the beach for infantry, artillery, and aviation platforms. The beach should also have simulated obstacles and minefields in order to exercise engineer and beach clearing assets.
- A dedicated OPFOR that has adequate shapes and emitters, uses enemy tactics, and can provide a realistic counter force.
- Real-time tracking, targeting, sensing, and feedback systems to evaluate indirect fires, maneuver, and direct fires. This system should be able to play back the entire scenario for evaluation and debrief.
- More realistic and adequate NBC training.
- An increase of laser capabilities within the complex.

Other observations:

- CLNC 2020 Plan is perceived as more restrictive with increase of density of ranges, thus more restrictions. (SOTG and Operating Units had limited, <10% input).
- Current MOUT capabilities equate to 50-60% combat readiness.
- MEU(SOC) readiness levels are estimated to be at 80% with current range capabilities.
- Current Embassy Compound equates to 30-40% combat readiness.
- R&S assets are 20% laser efficient under current restrictions.

RCMP CONTACT FORM

No. 29

Name/Company: Karl Whittenberg (SRS), Mike Wentz (SRS)

Person Contacted: Joe Ramirez

Organization: MCB Camp Lejeune Training Resources Management Division
Public Outreach

Telephone/Email:

Date: December 18, 2002

Reason for Contact: Liaison with Mr. Ramirez and the Training Resources
Management Division

Summary of Discussion:

Karl Whittenberg and Mike Wentz (SRS Technologies) met with Joe Ramirez from the MCBCL Training Resources Management Division and Public Outreach. The purpose of the meeting was to follow up on a previous meeting (October 17, 2002). The RCMP effort will necessitate frequent and routine coordination between participating parties to conduct research, collect information, conduct reviews, and formulate findings relevant to environmental matters at MCBCL.

Mr. Ramirez is responsible for two distinct functional areas at MCBCL; Training Resources Management and Public Outreach.

Training Resources Management. On this trip, we discussed range maintenance in more detail. In his role, Mr. Ramirez provides maintenance, construction, and renovation on the Camp Lejeune range complex. He also does the budgeting for the Training and Operations Department. He gets his requirements from Range Operations and Range Development. Both these organizations define the range requirements against which Mr. Ramirez and his staff construct the physical resources to be placed on the ranges.

There are two maintenance activities: routine maintenance and emerging maintenance. Routine maintenance is done quarterly. At such times, selected ranges are closed for maintenance until completion. Emerging maintenance occurs when a range inspector finds a discrepancy worthy of attention. Whenever a unit arrives at a range, the person in charge coordinates with the range inspector who inspects and opens the range for the unit training. The range inspector enters range discrepancies into a PDA and at the end of the day downloads the PDA information into the CL maintenance server. Mr. Ramirez' staff reviews the range information to identify, prioritize, and schedule maintenance work. Both routine and emerging maintenance are funded out of the O&M budget.

Range refurbishment is a non-O&M funded activity. Refurbishment, including range modifications, is unfunded. The Training Resources Management Branch has to find funds when they wish to do any type of range refurbishment or modification.

Devegetation is perhaps the most invasive maintenance issue. A number of ranges are kept closed due to vegetation encroachment. There is no provision for investment in revegetation equipment. Presently, two large pieces of equipment used for removing trees and heavy brush are approaching the end of their service lives. Mr. Ramirez acknowledges that they will need to be replaced within the next year or two to keep pace with revegetation requirements. He also concurred that keeping statistics on range closures due to vegetation would be a useful tool to articulate the pervasive nature of vegetation and the impacts of equipment shortages on revegetation maintenance.

Public Outreach. Beyond the outreach and JLUS discussion from October 17, Mr. Ramirez gave us a CD of the CL RACUZ.

Following is from October 17 session:

Public Outreach involves MCBCL efforts to influence community planning pertinent to current and projected MCBCL mission and range operations. Mr. Ramirez sits on a number of community groups including citizen committees, community planning groups, Joint Land Use (JLUS) committees, and the local housing board. His Camp Lejeune influence on the Citizens' Committee has contributed to a favorable impression of Camp Lejeune as expressed in the Citizens Comprehensive Plan for Onslow County (Draft), September 2002. The Citizens Comprehensive Plan addresses transportation, land use, housing, environment, education, parks and recreation, infrastructure and facilities and other issues relevant to Onslow County. Mr. Ramirez, as a sitting committee member, makes substantial contribution by presenting Camp Lejeune issues and future needs.

Mr. Ramirez is also deeply involved in the JLUS program to establish buffer lands adjacent to the Camp Lejeune range complex boundaries. The Office of Economic Adjustment (OEA) and the local community have agreed to share a 50/50 split in funding. Mr. Ramirez will represent Camp Lejeune during public hearings and the development of implementation strategies. The end result of the JLUS effort will be a Memorandum of Agreement that will formally recognize the existence of the allocated lands and the implementation strategy.

Both Camp Lejeune and the local community recognize the environmental problems encroaching on Camp Lejeune. Mr. Ramirez offered to give the Contractors the Camp Lejeune encroachment briefing describing the issue. Encroachment takes the form of endangered species, noise, housing development expansion, and local and State politics. General Mize is very involved with the public outreach efforts and champions the Citizens' Committee planning and JLUS activities. On a separate note, Mr. Ramirez recommended that the JLUS program be linked to Cherry Point, since the Camp Lejeune and Cherry Point range complexes are inextricably linked.

Mr. Ramirez is exceptionally knowledgeable about range resources and public outreach. He very cordial throughout and displayed a keen interest in the RCMP effort and a commitment to participate fully. He is a valuable resource.

RCMP CONTACT FORM

No. 30

Name/Company: Karl Whittenberg (SRS), Steve Golle (TEC)

Person Contacted: Renee Hawthorne

Organization: MCB Camp Lejeune, Deputy G3

Telephone/Email:

Date: December 18, 2002

Reason for Contact: Liaison with Ms. Hawthorne

Summary of Discussion:

Karl Whittenberg (SRS) and Steve Golle (TEC) met with Renee Hawthorne from the MCBCL, G3. The purpose of the meeting was to discuss how the CL trip was proceeding and to get insight into the CL budgeting process for ranges.

CL funding is based on precedent not requirements. O&T identifies range requirements internally, but there is no standing process by which range management determines range requirements, submits the requirements, and CL O&T receives funding for requirements. In July each year, O&T asks the Controller for funding for the next year. In September, the Controller gives funding to O&T for range operations. The allocated funding is “issued” based on previous year amounts, not on range requirements. O&T prioritizes the funding among its range requirements. Clearly, there is not enough to go around so O&T must put some requirements that are “below the line” on hold or cancel them. Normally there is some additional funding at mid- and end-year points. I&E provides about \$200K also. Contracts funding comes from SYSCOM. I&E may contribute funding for case-by-case projects. Range improvements are not funded in any formal way. The ranges “limp along” with no significant investment. All in all, funding is very tight with little ability to do more than sustain the ranges at current levels. The funding and budgeting process at CL highlights the lack of formal, established funding streams or range program proponentcy at higher HQ levels.

Ms. Hawthorne also described the “balanced scorecard” process. Using scorecards, range management identifies various range metrics and evaluates them. The metrics data then are used to identify emerging challenges and help formulate sustainment strategies including funding priorities.

RCMP CONTACT FORM

No. 31

Name/Company: Karl Whittenberg (SRS)

Person Contacted: Pete Black

Organization: MCB Camp Lejeune, Forestry Section Manager

Telephone/Email: 910.451.2195 x7220/blackpe@lejeune.usmc.mil

Date: December 18, 2002

Reason for Contact: Liaison with Mr. Black

Summary of Discussion:

Karl Whittenberg (SRS) met with Pete Black from the MCBCL, Environmental Management organization. Mr. Black manages the Forestry Section within the Environmental Conservation Branch. The purpose of the meeting was to discuss forestry management issues.

The CL forestry management involves endangered species, forest and natural resources conservation, and fire management. CL forestry management is embodied in the “Wild Land Fire Management Plan” and the “Red Cockaded Woodpecker Management Plan” (both plans archived in the “Reference Materials” folder on the Environmental Server, SRS). Details on the CL Environmental Management and the Forestry Section can be found at <http://www.lejeune.usmc.mil/emd/>.

RCMP CONTACT FORM

No. 32

Name/Company: Karl Whittenberg; Mike Wentz (SRS)

Person Contacted: Peggy Brilely

Organization: MCB Camp Lejeune, Range Development Division

Telephone/Email: 910.451.4480/brilelymg@lejeune.usmc.mil

Date: December 18, 2003

Reason for Contact: Liaison with Ms. Brilely

Summary of Discussion:

Karl Whittenberg (SRS) met with Peggy Brilely from the MCBCL, Range Development Division. Ms. Brilely manages the Division and developed the “Range and Training Areas Transformation Vision 2020.” This vision looks out to 2020 and forecasts range requirements and evolution strategies. The Vision 2020 briefing is part of the reference repository in the CP/CL RCMP.

The purpose of the meeting was to inquire about the background of the Vision 2020 study. Ms. Brilely has done a very good job of capturing the emerging challenges to CL over the next couple decades. Documenting the background serves to put her study into context with the larger Camp Lejeune strategic planning process.

The Integrated Natural Resources Management Plan (INRMP) activity at CL during the 1999–2000 timeframe identified the need for CL to develop a long-range vision of the range infrastructure. Ms. Brilely was put in charge of the vision effort and named it “Range and Training Area Transformation Vision 2020.” The development of MG Mize’s “Strategic Plan” in the 2001 timeframe added emphasis to the Vision 2020 study. In August 2002, MG Mize, CG Camp Lejeune, and MG Burn, CG 2MEF, approved the Vision 2020 study. MG Mize then took the Vision 2020 briefing on the road to introduce interested parties, including TECOM. Top the CL range transformation plan.

Follow-on updates to the Vision 2020 study will include more definitive engineering analyses of beach, noise, and tank transport. These areas have known deficiencies to be resolved in subsequent version of the study.

Refer to Contact # 12? 12 Brilely-9.3.02.doc

RCMP CONTACT FORM

No. 33

Name/Company: Karl Whittenberg; Mike Wentz (SRS)

Person Contacted: Emily Sylvester

Organization: MCB Camp Lejeune, Environmental Management Division

Telephone/Email: 910.451.5068/sylvesterem@lejeune.usmc.mil

Date: January 22, 2003

Reason for Contact: Air Quality Encroachment Impacts

Summary of Discussion:

Karl Whittenberg and Mike Wentz (SRS) met with Emily Sylvester from the MCBCL, Environmental Management Division (EMD). Ms. Sylvester is the air quality expert.

The purpose of the meeting was to obtain air quality encroachment impacts on the MCBCL ranges. We reviewed the air quality issue for all MCBCL ranges collectively.

Currently, MCBCL is in an air quality attainment area. The entire State of North Carolina is an attainment area as specified by the National Ambient Air Quality Standard (NAAQS). There are no MCBCL emissions that exceed the NAAQS that would designate MCBCL as non-attainment. Nonetheless, stationary source emissions (fires, power plants, fueling stations) are state regulated and must be monitored, while mobile source emissions (vehicles, combat obscurants) are neither regulated nor monitored. The MCBCL EMD staff monitor regulated stationary emissions using XX # emission meters randomly (???) placed throughout the MCBCL range complex. Mobile emissions are not monitored because there is no requirement to monitor mobile emissions in an attainment area. Readings from the monitoring meters provide the data for the Annual Air Emission Inventory, required by Title 5, Clean Air Act (CAA). Title III, Superfund Amendments and Reauthorization Act (SARA), also known as the Emergency Planning and Community Right to Know Act (EPCRA), requires the MCBCL EMD to share the data in the Annual Air Emission Inventory report with the public through North Carolina's State Emergency Response Commission (SERC) and Onslow County's Local Emergency Planning Committee (LEPC).

There are no forecast non-attainment areas for particulate matter (PM) 2.5, PM 10, and ground level ozone as specified in pending State and Federal legislation. The EMD is concerned, however, with the potential negative impact of regulated emissions from the Super Hornet, should the USMC base the Super Hornet at Cherry Point. Excessive emissions from the Super Hornet have the potential of making MCASCP and MCBCL non-attainment areas. Should that happen, all MCBCL emissions would fall under severe regulatory compliance requiring considerable mitigation planning and strategies.

RCMP CONTACT FORM

No. 34

Name/Company: Karl Whittenberg; Mike Wentz (SRS)

Person Contacted: Karen Ogden

Organization: MCB Camp Lejeune, Environmental Management Division

Telephone/Email: 910.451.7229/ogdenkr@lejeune.usmc.mil

Date: January 22, 2003

Reason for Contact: Endangered Species and Critical Habitat Encroachment Impacts

Summary of Discussion:

Karl Whittenberg and Mike Wentz (SRS) met with Karen Ogden from the MCBCL, Environmental Management Division (EMD). Ms. Sylvester is the endangered species and critical habitat expert.

The purpose of the meeting was to obtain endangered species and critical habitat encroachment impacts on the MCBCL ranges. We reviewed the endangered species and critical habitat issue for nine range categories: Firing, Fire and Maneuver, East Training and Maneuver, West Training and Maneuver, Sandy Run, Impact, Engineer, MOUT, Others.

There are five endangered and threatened species on MCBCL range complex: red cockaded woodpecker (RCW) (endangered), rough leaved loosestrife (threatened), amaranth (threatened), loggerhead turtle (threatened), and a bald eagle nest (threatened). There is no designated critical habitat on MCBCL. Roughly one percent of range land is set aside to protect the endangered and threatened species. Set aside lands include RCW nesting sites and 200' buffer zones around nesting sites (RCW clusters); loosestrife sites and 100' buffer zones around sites; individual amaranth plant sites, and the bald eagle nest with a 500' vertical and 100' horizontal buffer zone around the nest.

Firing Ranges (A-1, B-12, D-9, D-29A, D-29B, D-30, E-1, F-4, F-6, F-11A, F-11B, F-18, G-3, G-3A, G-5, G-7, G-8, G-9, H-1,2,3, I-1, K-211, K-212A, K-323, K-301, K-302, K-303, K-305, K-309, K-315, K-321, K-322, K-325, K-405, K-406B, K-407, SR-11)

There is no set aside land on the firing ranges themselves. There are some RCW clusters and loosestrife sites in the firing range fans, however. The RCW clusters and loosestrife sites are restricted from devegetation. Should there be training activity in the fans, such activity would be subject to vegetation restrictions similar to any other range activity (e.g., lack of target identification due to vegetation precludes firing on that target). The firing ranges have no environmental encroachment from endangered species, critical habitat, or set aside lands.

Fire and Maneuver Ranges (F-2, F-5, G-6/CBC, K-212, K-319, K-402, L-5, SR-6 South, SR-6 North, SR-7, SR-10)

Among the fire and maneuver ranges, G-6 and SR-10 have habitat for the RCW. The XXX Course that uses the fire and maneuver ranges, however, is designed around the RCW clusters. There is only walking access through the RCW clusters. The course design is a workaround that mitigates any encroachment impact on training? no training takes place within the RCW clusters.

East Training and Maneuver Ranges (D, DB, F, FA, FB, FC, FD, G, GA, GB, GG, GI, H, HA, HB, HC, HD, HE, HF, I, IA, IB, ID, IE, IF, J, JA, JB, JC, JD, Q, QA, QB, R, RA, RB, E)

There are set aside areas for the RCW, loosestrife, amaranth, turtles, and the bald eagle nest in the East ranges. There is encroachment in the protected areas (including buffer zones) to the extent that bivouac, command post, digging, and vehicular training activities are prohibited. The turtle season is from May 15 to October 31 each year. During this period, there is no restriction imposed as EMD relocates turtle nests away from training activities. Other than the limited restriction on bivouac, command post, digging, and vehicular training activities within the set aside areas, there is no other encroachment impact on training within the East training and maneuver ranges.

West Training and Maneuver Ranges (B, BB, BC, BD, K, KA, KB, KC, L, LA, LB, LC, M, MA, MB, MC, MD, ME, MF)

As with East ranges, there are set aside areas for the RCW, loosestrife, amaranth, turtles, and the bald eagle nest in the West ranges. There is encroachment in the protected areas (including buffer zones) to the extent that bivouac, command post, digging, and vehicular training activities are prohibited. Other than the limited restriction on bivouac, command post, digging, and vehicular training activities within the set aside areas, there is no other encroachment impact on training within the West training and maneuver ranges.

Sandy Run Ranges (SA, SB, SC, SD, SE, SG, SH, SK, SL, SM, SN, SP, SQ, SR, ST, SU, SV, SW, SR-6 South, SR-6 North, SR-7, SR-10, SR-10, SR-11, TLZ, Turkey/Pheasant, Bldgs SR-25.29, OP-8-11, BnBiv 1&2, Restricted Areas)

In the Greater Sandy Run Areas (GSRA), the SR, SM, SU and SP ranges have habitat for the loosestrife. Habitat in SM, SU, and SP is along the power lines. Habitat for loosestrife includes the plant site and a 100' buffer around each site. In the buffer zones, bivouac, command post, digging, and vehicular training activities are prohibited.

Impact Areas (BT-2/N-1, G-10, K-2)

Two impact areas have habitat set aside for the RCW, the loosestrife, and the loggerhead turtle? G10 for the RCW and loosestrife and BTZ for the turtle. In G10, the habitat is for the buffer zone only, not G10 proper. In the G10 buffer, activity is restricted in areas of vegetation protecting the RCW and loosestrife. Thus, parts of the buffer zones have obscuring vegetation that restricts access and prohibits live fire, principally from artillery. Regarding the turtles, EMD manages the turtle nesting sites to preclude training interruptions. This is the same management process used on the East range beach areas. Endangered species and critical habitat encroachment in the impact areas is negligible.

Engineer Ranges (ETA-1, ETA-2, ETA-3, ETA-4, ETA-5)

There are no endangered or threatened species on the engineer ranges; therefore, there is no endangered species and critical habitat encroachment impact present on the engineer ranges.

Other Ranges

MOUT Ranges (*ETA-5A, K-402A, K-406A, K-408, MAC-1, MAC-2, MAC-3, MAC-4, MAC-5*)

There are no endangered species or critical habitat on MOUT ranges; therefore, no environmental encroachment.

Other Ranges (*F-17, K-317*)

There are no endangered species or critical habitat on F-17 (training towers) and K-317 (close combat range); therefore, no environmental encroachment.

RCMP CONTACT FORM

No. 35

Name/Company: Tammy Mason/ SRS Technologies and Steve Golle/TEC

Person Contacted: LtCol Chris Clayton (AH-1W Pilot)
Maj Gary Maddux (CH-53 Pilot)
Maj Bert Pridgen (CH-53 Pilot)
Capt Mark Makarewicz (CH-46 Pilot)

Organization: MAG-26

Telephone/Email: (910) 449-6178

Date: 22 January 2003

Reason for Contact: Rotary Wing Operational Perspective RCMP

Summary of Discussion:

Tammy and Steve met with Major Gary Maddux to discuss aviation operations at the Cherry Point/Camp Lejeune Range Complex. The meeting had been arranged previously with Major Maddux for both fixed-wing and rotary-wing units attendance, however, the fixed-wing participation was not fulfilled due to operational commitments. The attendees at the meeting were all rotary-wing background currently assigned to the MAG-26 Headquarters: LtCol Chris Clayton (AH-1W Pilot), Maj Gary Maddux (CH-53 Pilot), Maj Bert Pridgen (CH-53 Pilot), and Capt Mark Makarewicz (CH-46 Pilot). The purpose of the meeting was to discuss MEU rotary wing air component PTP range-related training requirements and the complete the "Triage" matrix that correlates the impact of SROC-identified environmental issues on required training. Steve requested MAG-26 provide a description of the "perfect" training environment they'd like to see to support their PTP-required training for Tactical Recovery of Aircrew Personnel (TRAP), Non-combatant Evacuation Operations (NEO), Embassy Reinforcement, Military Operations in an Urban Terrain (MOUT), Anti-terrorism Operations (AT OPs), Airfield Seizure, and Port Seizure operations, which has been promised to be completed within 1 week.

MEU ACE:

- The composition of a "typical" MEU ACE will be (12) CH-46s for lift, (4) CH-53s for lift, (4) AH-1Ws and (6) AV-8Bs for combat escort and close air support, and (2) UH-1 for Command and Control. There are also "typically" (2) KC-130s on a tether to respond as required.
- The MEU ACE does not include any dedicated USMC F/A-18D aircraft assets, only AV-8b fixed-wing assets. If the MEU requires USMC F/A-18 assets, the MEU would request via their operational chain of command, those assets from either the Joint Forces Air Component Commander (JFACC; if the JFACC has been established and generally, USAF)

or from the Carrier Battle Group Commander (CVBG) (if the F/A-18s are embarked aboard ship).

- During SOCEX, the MEU will block a scheduled time period with FACSFAC Vacapes for use of W-122. The time not utilized will be returned to FACSFAC Vacapes.
- When developing the required composition of MEU air events, you can trade CH-46s and CH-53s on a 2 for 1 basis (i.e. (1) CH-53 has the lift capacity of (2) CH-46s).
- Without access to Vieques, deploying MEUs must wait until arriving in theater to conduct combined arms exercises. 29 Palms is the only USMC range where this can be achieved.
- Currently, the SOTG expects/requires all pilots to be fully T&R 300-level qualified (including full low-light level operations) at the time they chop to the MEU. It wasn't always this way; SOTG used to require/expect only a portion of the pilots to be fully 300-level qualified and fully dedicated to the initial part of the PTP to allow the rest of the pilots to complete the 300-level training.
- When Steve asked the group if some kind of ACE PTP schedule currently existed that would correlate specific required T&R events to PTP training, LtCol Clayton recommended we speak with LtCol Desens (2nd MAW G-3 Future Plans), who is currently working on MEU ACE PTP issues.
- Typical MEU rotary wing ACE weapons include 50 cal, 20 MM, 2.75 in rockets, TOW and Hellfire. Any or all of these weapon types could be used during a "typical" MEU event.
- PTP Training event specific observations: during SOCEX, a MEU ACE will be expected to be able to conduct up to three of the following events simultaneously:
 - (1) TRAP. Typical ACE composition is (2) CH-53s or (4) CH-46s, (2) AH-1Ws, and (2) AV-8Bs. CL training environment impacts their ability to conduct realistic training; specifically, can't do long-range insertion and can't fly under the gun line, thereby impacting ability to conduct coordinated operations.
 - (2) NEO. Typical ACE composition is (4) CH-46s, with AH-1Ws and/or AV-8Bs "on call."
 - (3) Embassy Reinforcement. Typical ACE composition is (2) CH-53s (or (4) CH-46s) and up to (4) AH-1Ws. Situation dependent; could also require and include some number of AV-8Bs. Use the CL Combat Town or a civilian location (preferred) for this training.
 - (4) MOUT. Typical ACE composition is (2) CH-53s (or (4) CH-46s) and (2-4) AH-1Ws.
 - (5) Airfield (or Port) Seizure. Situation dependent; would normally consist of at least (4) CH-53s or (6) CH-46s for insertion.

Cherry Point

- CH-46s and CH-53s have few absolute requirements for use of the Cherry Point (CP) BT-9 or BT-11 ranges. They can expend 50 cal ammunition on CP ranges, but the target sets are too structured (restricted patterns, static targets, can't land, etc.) so they prefer to go elsewhere for live-fire training.
- There's a lot of "horse trading" and "piggybacking" associated with use of the CP ranges. For example, if a unit is scheduled for a CP range but another unit has a limited requirement

to use those same range assets, the first unit might invite the second unit to tag along, so both units can use the same CP range event/time.

Camp Lejeune

- MAJ Maddux was part of a group that just completed a test at GSRA, the report for which is being currently prepared. The purpose of the test was to evaluate the feasibility of using the GSRA to support rotary wing MEU training. The GSRA offers a much better training environment than other Camp Lejeune (CL) ranges and additional training opportunities not available at CP BT-9 and BT-11. The most important advantages of using the GSRA include location, variety and fidelity of target sets, and the ability to employ more realistic operations and tactics in a (limited) combined arms environment. One of the key factors expected to influence the final recommendation resulting from the test is the anticipated short- and long-term impact of using air-to-ground ordnance against the GSRA targets; specifically, will air-to-ground operations result in an unacceptable amount of damage to the GSRA's moving targets' "machinery" and reduce significantly the current anticipated "service life" of the targets themselves?

MCAS New River

- The pilots indicated that MCAS New River operating hours were more of an impact on required low-light level training than the CL range restrictions.

MISC.

- Newest USMC doctrines are Ship to Objective Maneuver (STOM) and Expeditionary Strike Group (ESG).
- STOM is (essentially) a long-range application of the Expeditionary Maneuver Warfare (EMW) doctrine. Where EMW assumes operations in the littoral area (shoreline to approximately 50 NM inland); STOM assumes operations 175-200 NM inland. The increased operating range associated with STOM imposes a significant logistics and support challenge.
- ESG. Not clear on the definition of this doctrine or method of execution. Needs clarification.